INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Joseph E. Kernan
Governor

Lori F. Kaplan
Commissioner

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.in.gov/idem

September 19, 2003

TO: Interested Parties / Applicant

RE: Viskase Corporation / 111-16843-00008

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-17-3-4 and 326 IAC 2, this approval is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-7-3 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

(1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
(2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
(3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

(1) the name and address of the person making the request;
(2) the interest of the person making the request;
(3) identification of any persons represented by the person making the request;
(4) the reasons, with particularity, for the request;
(5) the issues, with particularity, proposed for considerations at any hearing; and
(6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNPER- MOD.dot 9/16/03

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(800) 451-6027
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MINOR SOURCE OPERATING PERMIT
OFFICE OF AIR QUALITY

Viskase Corporation
102 E. Bailie Street
Kentland, Indiana 47951

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 111-16843-00008	
Issued by: **Original signed by** Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: **September 19, 2003** Expiration Date: **September 19, 2008**

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 and A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary cellulose and plastic casings manufacturing plant.

Authorized Individual:	Plant Engineering
Source Address:	102 E. Bailie Street, Kentland, Indiana 47951
Mailing Address:	102 E. Bailie Street, Kentland, Indiana 47951
General Source Phone:	(219) 474-5101
SIC Code:	3089
County Location:	Newton
Source Location Status:	Attainment for all criteria pollutants Attainment area for all other criteria pollutants
Source Status:	Minor Source, under PSD or Emission Offset Rules; Minor Source, Section 112 of the Clean Air Act Not in 1 of 28 Source Categories

A.2 Emissions Units and Pollution Control Equipment Summary

This stationary source is approved to operate the following emissions units and pollution control devices:

(a) One (1) flexographic printing press (identified as press ID 1) printing meat casings, exhausting at stack ID 1. This unit was constructed in 1976.

(b) One (1) flexographic printing press (identified as press ID 2) printing meat casings, exhausting at stack ID 3. This facility was constructed in 1977.

(c) One (1) flexographic printing press (identified as press ID 3) printing meat casings, exhausting at stack ID 5. This facility was constructed in 1981.

(d) One (1) flexographic printing press (identified as press ID 4) printing meat casings, exhausting at stack ID 6. This facility was constructed in 1998.

(e) Three (3) natural gas-fired boilers (identified as Boiler 1, 2 and 3), with a combined heat input capacity of ten (10) MMBtu per hour. Boiler 1 and 2 were installed in 1976 and Boiler 3 was installed in 1981.

(f) Fibrous area consisting of large casings finishing area, Shirmatic smoke and Shirmatic non-smoke area, with a maximum throughput rate of 822 pounds of cellulose casings per hour. This unit was constructed in 1976.

(g) One (1) nylon extrusion line with a maximum throughput rate of 156 pounds of plastic pellets per hour. This unit was constructed in 2001.

(h) Small casings finishing area consisting of forty-six (46) shirring machines, and a maximum throughput rate of 1853 pounds of pure cellulose casings per hour. This unit was constructed in 1976.

(i) Four (4) storage tanks, including:

(1) One (1) 8,000 gallon storage tank (identified as Tank 1), constructed in 1978 and used to store virgin mineral oil.

(2) One (1) 4,900 gallon storage tank (identified as Tank 2), constructed in 1978 and used to store used mineral oil.

(3) One (1) 6,000 gallon storage tank (identified as Tank 3), constructed in 1978 and used to store propylene glycol.

(4) One (1) 7,700 gallon storage tank (identified as Tank 4), constructed in 1994 and used to store liquid smoke.

(j) Four (4) natural gas fired drying ovens, with a combined heat input capacity of four (4.0) MMBtu per hour. These units were installed in 1976, 1977, 1981, and 1998.

SECTION B GENERAL CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

B.1 Permit No Defense [IC 13]

This permit to operate does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.2 Definitions

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

B.4 Permit Term and Renewal [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions of this permit do not affect the expiration date.

The Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date. If a timely and sufficient permit application for a renewal has been made, this permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.

B.5 Modification to Permit [326 IAC 2]

All requirements and conditions of this operating permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

B.6 Annual Notification [326 IAC 2-6.1-5(a)(5)]

(a) Annual notification shall be submitted to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.

(b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.

(c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

Compliance Branch, Office of Air Quality
Indiana Department of Environmental Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015

(d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

B.7 Preventive Maintenance Plan [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each emissions unit:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The PMP extension notification does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The Permittee shall implement the PMPs, including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.

(c) A copy of the PMP's shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMP whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMP does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1–6-3 for that unit.

B.8 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

(a) Permit revisions are governed by the requirements of 326 IAC 2-6.1-6.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality

100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application shall be certified by an "authorized individual" as defined by 326 IAC 2-1.1-1.

(c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

(d) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.

B.9 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)][IC 13-14-2-2] [IC 13-30-3-1]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) As authorized by the Clean Air Act, IC-13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under this title or the conditions of this permit or any operating permit revisions;

(c) As authorized by the Clean Air Act, IC-13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;

(d) As authorized by the Clean Air Act, IC-13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) As authorized by the Clean Air Act, IC-13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.10 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)] :

(a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch, within thirty (30) days of the change.

(b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).

(c) IDEM, OAQ, shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

B.11 Annual Fee Payment [326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing.

(b) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, I/M & Billing Section), to determine the appropriate permit fee.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 Permit Revocation [326 IAC 2-1.1-9]

Pursuant to 326 IAC 2-1.1-9 (Revocation of Permits), this permit to operate may be revoked for any of the following causes:

(a) Violation of any conditions of this permit.

(b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.

(c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.

(d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.

(e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.4 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.5 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by an “authorized individual” as defined by 326 IAC 2-7-1(34).

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Demolition and Renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

(g) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirements to use an Indiana Accredited Asbestos inspector is not federally enforceable.

Testing Requirements

C.6 Performance Testing [326 IAC 3-6]

(a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date.

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14 days) prior to the actual date.

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.7 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U.S. EPA.

Compliance Monitoring Requirements

C.8 Monitoring Methods [326 IAC 3][40 CFR 60][40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60, Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

Record Keeping and Reporting Requirements

C.9 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

(a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.

(b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.

(c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).

(d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.10 General Record Keeping Requirements [326 IAC 2-6.1-5]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented when operation begins.

C.11 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

(a) Reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(c) Unless otherwise specified in this permit, any reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The reports do not require the certification by an “authorized individual” as defined by 326 IAC 2-1.1-1(1).

(d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description:

(a) One (1) flexographic printing press (identified as press ID 1) printing meat casings, exhausting at stack ID 1. This unit was constructed in 1976.

(b) One (1) flexographic printing press (identified as press ID 2) printing meat casings, exhausting at stack ID 3. This facility was constructed in 1977.

(c) One (1) flexographic printing press (identified as press ID 3) printing meat casings, exhausting at stack ID 5. This facility was constructed in 1981.

(d) One (1) flexographic printing press (identified as press ID 4) printing meat casings, exhausting at stack ID 6. This facility was constructed in 1998.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.1.1 Volatile Organic Compounds (VOCs) [326 IAC 8-5-5]

(a) Any change or modification which would increase the potential emissions of VOC from each of the two (2) flexographic printing presses (identified as press ID 3 and 4) equal to or greater than twenty-five (25) tons per year, must receive prior approval from IDEM, OAQ.

(b) Any change or modification which would increase the potential emissions of VOC from each of the two (2) flexographic printing presses (identified as press ID 1 and 2) equal to or greater than one hundred (100) tons per year, must receive prior approval from IDEM, OAQ.

D.1.2 Volatile Organic Compounds (VOCs) [326 IAC 2-7]

This source is not subject to the requirements of 326 IAC 2-7 (Part 70 Permit Program) because the potential to emit VOC from the entire source is less than one hundred (100) tons per year. Any change or modification which would increase the potential to emit of VOC equal to or greater than one hundred (100) tons per year must receive prior approval from IDEM, OAQ.

D.1.3 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Conditions D.1.1 and D.1.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the “as supplied” and “as applied” VOC data sheets. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.1.4 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities.

Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.5 Record Keeping Requirements

(a) To document compliance with Condition D.1.1 and D.1.2, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with

the VOC usage limits and the VOC emission limits established in Condition D.1.1 and D.1.2.

(1) The VOC content of each coating material and solvent used.

(A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

(B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents.

(2) The cleanup solvent usage for each month;

(3) The total VOC usage for each month;

(4) The weight of VOCs emitted for each compliance period; and

(5) The records of the amount of waste ink sent off-site.

(b) To document compliance with Condition D.1.4, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description:

(e) Three (3) natural gas-fired boilers (identified as Boiler 1, 2 and 3), with a combined heat input capacity of ten (10) MMBtu per hour. Boiler 1 and 2 were installed in 1976 and Boiler 3 was installed in 1981.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.2.1 Particulate Matter Limitation (PM) [326 IAC 6-2-3]

Pursuant to 326 IAC 6-2-3(e) (Particulate emission limitations for sources of indirect heating: emission limitations for facilities specified in 326 IAC 6-2-1(b)), the particulate emissions from three (3) boilers, which were constructed after June 8, 1972, shall in no case exceed 0.6 pounds of particulate matter per million British thermal units heat input.

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description:

(f) Fibrous area consisting of large casings finishing area, Shirmatic smoke and Shirmatic non-smoke area, with a maximum throughput rate of 822 pounds of cellulose casings per hour. This unit was constructed in 1976.

(g) One (1) nylon extrusion line with a maximum throughput rate of 156 pounds of plastic pellets per hour. This unit was constructed in 2001.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.3.1 Particulate [326 IAC 6-3]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate emissions from the fibrous area and nylon extrusion line shall not exceed 2.3 and 0.7 pounds per hour, when operating at a process weight rate of 822 and 156 pounds per hour, respectively.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description:

(h) Small casings finishing area consisting of forty-six (46) shirring machines, and a maximum throughput rate of 1853 pounds of pure cellulose casings per hour. This unit was constructed in 1976.

(i) Four (4) storage tanks, including:

(1) One (1) 8,000 gallon storage tank (identified as Tank 1), constructed in 1978 and used to store virgin mineral oil.

(2) One (1) 4,900 gallon storage tank (identified as Tank 2), constructed in 1978 and used to store used mineral oil.

(3) One (1) 6,000 gallon storage tank (identified as Tank 3), constructed in 1978 and used to store propylene glycol.

(4) One (1) 7,700 gallon storage tank (identified as Tank 4), constructed in 1994 and used to store liquid smoke.

(j) Four (4) natural gas fired drying ovens, with a combined heat input capacity of four (4.0) MMBtu per hour. These units were installed in 1976, 1977, 1981, and 1998.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

There are no specifically applicable regulations that apply to these units.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH

MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Company Name:	**Viskase Corporation**
Address:	**102 E. Bailie Street**
City:	**Kentland, Indiana 47951**
Phone #:	**(219) 474-5101**
MSOP #:	**111-16843-00008**

I hereby certify that Viskase Corporation is
9 still in operation.
9 no longer in operation.

I hereby certify that Viskase Corporation is
9 in compliance with the requirements of MSOP 111-16843-00008
9 not in compliance with the requirements of MSOP 111-16843-00008

Authorized Individual (typed):
Title:
Signature:
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:

MALFUNCTION REPORT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
FAX NUMBER - 317 233-5967

This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?_____, 25 TONS/YEAR SULFUR DIOXIDE ?_____, 25 TONS/YEAR NITROGEN OXIDES?_____, 25 TONS/YEAR VOC ?_____, 25 TONS/YEAR HYDROGEN SULFIDE ?_____, 25 TONS/YEAR TOTAL REDUCED SULFUR ?_____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?_____, 25 TONS/YEAR FLUORIDES ?_____, 100TONS/YEAR CARBON MONOXIDE ?_____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?_____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?_____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?_____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?_____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERMIT LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY:_____PHONE NO. ( )_____
LOCATION: (CITY AND COUNTY)_____
PERMIT NO. _____ AFS PLANT ID: _____ AFS POINT ID: _____ INSP:_____
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND
REASON:_____
_

DATE/TIME MALFUNCTION STARTED: _____/_____/ 20____ _____ AM /PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION:_____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE_____/_____/ 20____ _____ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER:_____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____
_____

MEASURES TAKEN TO MINIMIZE EMISSIONS:_____
_____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES:_____
CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS:_____
CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT:_____
INTERIM CONTROL MEASURES: (IF APPLICABLE)_____
_____
_____

MALFUNCTION REPORTED BY:_____TITLE:_____

(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY:_____DATE:_____TIME:_____

*SEE PAGE 2

Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

_____

_____

issued September 19, 2003

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a
Minor Source Operating Permit

Source Background and Description

Source Name:	Viskase Corporation
Source Location:	102 E. Bailie Street, Kentland, Indiana 47951
County:	Newton
SIC Code:	3089
Operation Permit No.:	111-16843-00008
Permit Reviewer:	ERG/SD

The Office of Air Quality (OAQ) has reviewed an application from Viskase Corporation relating to the operation of a cellulose and plastic casings manufacturing plant.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

(a) One (1) flexographic printing press (identified as press ID 1) printing meat casings, exhausting at stack ID 1. This unit was constructed in 1976.

(b) One (1) flexographic printing press (identified as press ID 2) printing meat casings, exhausting at stack ID 3. This facility was constructed in 1977.

(c) One (1) flexographic printing press (identified as press ID 3) printing meat casings, exhausting at stack ID 5. This facility was constructed in 1981.

(d) One (1) flexographic printing press (identified as press ID 4) printing meat casings, exhausting at stack ID 6. This facility was constructed in 1998.

(e) Three (3) natural gas-fired boilers (identified as Boiler 1, 2 and 3), with a combined heat input capacity of ten (10) MMBtu per hour. Boiler 1 and 2 were installed in 1976 and Boiler 3 was installed in 1981.

(f) Fibrous area consisting of large casings finishing area, Shirmatic smoke and Shirmatic non-smoke area, with a maximum throughput rate of 822 pounds of cellulose casings per hour. This unit was constructed in 1976.

(g) One (1) nylon extrusion line with a maximum throughput rate of 156 pounds of plastic pellets per hour. This unit was constructed in 2001.

(h) Small casings finishing area consisting of forty-six (46) shirring machines, and a maximum throughput rate of 1853 pounds of pure cellulose casings per hour. This unit was constructed in 1976.

(i) Four (4) storage tanks, including:

(1) One (1) 8,000 gallon storage tank (identified as Tank 1), constructed in 1978 and used to store virgin mineral oil.

(2) One (1) 4,900 gallon storage tank (identified as Tank 2), constructed in 1978 and used to store used mineral oil.

(3) One (1) 6,000 gallon storage tank (identified as Tank 3), constructed in 1978 and used to store propylene glycol.

(4) One (1) 7,700 gallon storage tank (identified as Tank 4), constructed in 1994 and used to store liquid smoke.

(j) Four (4) natural gas fired drying ovens, with a combined heat input capacity of four (4.0) MMBtu per hour. These units were installed in 1976, 1977, 1981, and 1998.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

New Emission Units and Pollution Control Equipment Receiving Prior Approval

There are no new construction activities included in this permit.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

(a) ID 56-08-8-0016, issued on January 26, 1976.

(b) ID 56-08-82-0030, issued on September 12, 1978.

(c) ID 56-11-86-0042, issued on April 8, 1983.

(d) ID 56-01-92-0050, issued on April 28, 1988.

(e) CP111-10106-00008, issued on October 7, 1998.

All conditions from previous approvals were incorporated into this permit.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (^{0}F)
1	Press 1	46	1.2	403	100

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (^{0}F)
2	Press 1 Corona Treater	35	0.5	--	72
3	Press 2	44	1.3	403	100
4	Press 2 Corona Treater	35	0.5	--	72
5	Press 3	40	2.0	403	100
6	Press 4	40	2.0	1200	100
7	Floor Sweep (All Presses)	44	1.66	2800	72
8	Ink Mixing Room	48	1.66	6500	72
9	Ink Storage Room	37	--	--	72
10	Virgin Solvent Room	10	--	--	--
11	Hazardous Waste Storage	9	--	--	--
12	Slugger Exhaust	54	1.66	--	77
13	Shirmatic 4 Exhaust	52	1.66	--	77
14	Shirmatic 6 Exhaust	57	1.66	--	77
15	Boiler 1	41	1	--	77
16	Boiler 2	41	1	--	77
17	Boiler 3	41	1.33	--	77
18	Steam Generator 1	42	1	--	77
19	Steam Generator 2	42	1	--	77
20	Press Area Local Exhaust (EF-5)	27	--	--	--
21	Lab Exhaust Hood	31	0.33	--	72

Recommendation

The staff recommends to the Commissioner that the operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on November 26, 2002, with additional information received on January 15, 2003 and January 27, 2003.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (Appendix A, page 1 through 11.)

Potential To Emit of Source Before Controls

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency.”

Pollutant	Potential To Emit (tons/year)
PM	0.58
PM-10	0.47
SO_2	0.04
VOC	76.3
CO	5.15
NO_x	6.13

HAP's	Potential To Emit (tons/year)
Single HAP (Xylene)	1.07
Combined HAPs	<25

(a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all criteria pollutants are less than 100 tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.

(b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of VOC pollutant is greater than 25 tons per year, therefore, the source is subject to the provisions of 326 IAC 2-6.1. A MSOP will be issued.

(c) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year, therefore, the source is not subject to the provisions of 326 IAC 2-7.

(d) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

County Attainment Status

The source is located in Newton County.

Pollutant	Status
PM-10	Attainment
SO_2	Attainment
NO_2	Attainment
Ozone	Attainment
CO	Attainment
Lead	Attainment

(a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Newton County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) Newton County has been classified as attainment or unclassifiable for PM10, SO2, NO2, Ozone, CO, and lead. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(c) Fugitive Emissions

Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2, 40 CFR 52.21, or 326 IAC 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Source Status

Existing Source PSD, Part 70 or FESOP Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	0.58
PM10	0.47
SO_2	0.04
VOC	76.3
CO	5.15
NO_x	6.13

(a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.

(b) These emissions were based on the potential to emit calculations provided in Appendix A.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

(a) each criteria pollutant is less than 100 tons per year,

(b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and

(c) any combination of HAPs is less than 25 tons/year.

This status is based on the revised potential to emit calculations (see Appendix A).

Federal Rule Applicability

(a) This source is not subject to the requirements of the New Source Performance Standard (NSPS), 40 CFR 60, Subpart QQ - Standards of Performance for the Graphic Arts Industry: Publication Rotogravure Printing (326 IAC 12), because this NSPS applies only to rotogravure printing presses. Viskase Corporation uses only flexographic presses at this plant.

(b) The three (3) boilers are not subject to the New Source Performance Standard, 40 CFR 60, Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units (326 IAC 12) because they were constructed prior to the applicability date of June 9, 1989 and have not been modified or reconstructed.

(c) Four (4) organic storage tanks, identified as Tank 1, 2, 3, and 4 having a capacity of 8000, 4900, 6000 and 7700 gallon, respectively are not subject to the requirement of the New

Source Performance Standard, 326 IAC 12, (40 CFR 60.110b, Subpart Kb) because their individual capacities are less than 40 cubic meters (10,567 gallons).

There are no other New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) applicable to this source.

(d) This source is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR 63, Subpart KK - National Emission Standards for the Printing and Publishing Industry (326 IAC 14), because this source does not operate a rotogravure or wide-web flexographic printing presses and is not a major source of hazardous air pollutants (HAPs).

(e) This source is not subject to the requirement of the National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR 63, Subpart UUUU- National Emission Standards for the Cellulose Products Manufacturing Industry (326 IAC 14), because it is not a major source of hazardous air pollutants (HAPs).

(f) This source is not subject to the requirement of the National Emissions Standards for Hazardous Air Pollutants (NESHAP), 40 CFR 63 Subpart JJJJ - National Emission Standards for Hazardous Air Pollutants: Paper and other Web Coating, because this source is not a major source of HAPs.

There are no other National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

Viskase Corporation was an existing minor source when it was built prior to the August 7, 1977 and is not in one (1) of the twenty-eight (28) listed source categories. The source was modified in 1981 to add one (1) flexographic printing press (identified as Press ID 3) and three (3) natural gas fired boilers; in 1998 to add one (1) flexographic printing press (identified as Press ID 4); in 1994 to add a organic storage tank (identified as tank 4) and in 2001 to add a nylon extrusion line. After each of these modifications, the potential to emit of each criteria pollutant from the entire source remained less than 250 tons per year. Therefore, the source is still a minor source under PSD and is not subject to the requirements of 326 IAC 2-2.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

Viskase Corporation was constructed prior to July 27, 1997. All new process lines added since July 27, 1997 do not have potential to emit HAP greater than 10 tons per year of a single HAP or greater than 25 tons per year of a combination of HAPs. Therefore, it was not subject to 326 IAC 2-4.1.

326 IAC 2-6 (Emission Reporting)

This source is located in Newton County and the potential to emit CO, VOC, NO_x, PM10 and SO_2, are less than one hundred (100) tons per year. Therefore, 326 IAC 2-6 does not apply.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Four (4) Flexographic Printing Presses

326 IAC 8-5-5 (Graphic Parts Operation)

Although constructed after November 1, 1980, the two (2) flexographic printing presses (identified as press ID 3 and 4), each have potential emissions of VOC less than twenty five (25) tons per year. The two (2) flexographic printing presses (identified as press ID 1 and ID 2), constructed before November 1, 1980, each have potential emissions of VOC less than one hundred (100) tons per year. Therefore, this source or each facility is not subject to the provisions of 326 IAC 8-5-5.

State Rule Applicability - Three (3) Natural Gas Fired Boilers

326 IAC 6-2-3 (a) (Particulate Emissions Limitations for Sources of Indirect Heating):

Pursuant to 326 IAC 6-2-3, the particulate emissions from the three (3) natural gas fired boilers of combined heat input capacity of 10 MMBtu/hr which were existing and in operation before September 21, 1983 shall not exceed the PM emission rate calculated using the following equation:

$$Pt = \frac{(C * a * h)}{\left(76.5 * Q^{0.75} * N^{0.25}\right)} = \frac{(50) * (0.67) * (41)}{(76.5) * (10)^{0.75} * (3)^{0.25}} = 2.43$$

where

Pt = emission rate limit (lbs./MMBtu)
C = 50 ug/m^3
a = plume rise factor (0.67)
Q = total source heat input capacity rating in million Btu per hour (10 MMBtu/hr)
N = number of stacks
h = stack height (ft)

However, 326 IAC 6-2-3(e) states that boilers constructed after June 8, 1972 shall in no case exceed 0.6 pounds of particulate matter per MMBtu heat input. Since 0.6 pounds per MMBtu is less than the limit calculated using the equation, boilers 1, 2 and 3 boilers shall each be limited to 0.6 pounds of PM per MMBtu heat input.

State Rule Applicability - Four (4) organic storage tanks

326 IAC 8-9 (Volatile Organic Storage Vessels)

The four (4) volatile organic storage tanks, identified as Tank 1, 2, 3, and 4, having a capacity of 8000, 4900, 6000, and 7700 gallon, respectively, are not subject to 326 IAC 8-9 (Volatile Organic Storage Vessels) because they are not located in the listed counties under 326 IAC 8-9.

State Rule Applicability - Nylon Extruder Line, **Small Casings Finishing Area** , **Fibrous Area**

326 IAC 8-1-6 (New Facilities - General Reduction Requirement)

Although the nylon extruder line was constructed after January 1, 1980, this unit is not subject to the requirements of 326 IAC 8-1-6 because the potential emissions of volatile organic compound

(VOC) is less than twenty-five (25) tons per year. The small casings finishing area and fibrous area are not subject to the requirements of 326 IAC 8-1-6 because these units were constructed before January 1, 1980 applicability date.

326 IAC 6-3-2 (Particulate Emission Limitations from Manufacturing Processes)

Pursuant to 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the fibrous area and nylon extrusion line shall not exceed 2.3 and 0.7 pounds per hour, when operating at a process weight rate of 822 and 156 pounds per hour, respectively.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

Based on the emissions data provided by the source, the particulate emissions from the fibrous area and nylon extrusion line are 0.02 and 0.002 pounds per hour, respectively. Therefore, the source will be in compliance with this rule.

State Rule Applicability - Four (4) Natural Gas Drying Ovens

There are no specifically applicable regulations apply to these emission units.

Conclusion

The operation of this cellulose and plastic casings manufacturing plant shall be subject to the conditions of the attached proposed Minor Source Operating Permit 111-16843-00008.

Natural Gas Combustion Only
Four (4) Drying Ovens

Company Name: Viskase Corp.
Address:
MSOP: 111-16843
Plt ID: 111-00008
Reviewer: ERG/SD
Date: May 30, 2003

Heat Input Capacity MMBtu/hour		Potential Throughput MMCF/year
4.0	(4 Units Total)	35.0

Pollutant

	PM*	PM10*	SO_2	NO_x	VOC	CO
Emission Factor (lb/MMCF)	7.6	7.6	0.6	100.0 **see below	5.5	84.0
Potential To Emit (tons/year)	0.13	0.13	0.01	1.75	0.10	1.47

*PM and PM_{10} emission factors are filterable and condensible PM and PM_{10} combined.
**Emission Factors for NO_x: Uncontrolled = 100, Low NO_x Burner = 50, Low NO_x

METHODOLOGY
All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Emission factors from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (July, 1998).

Potential Throughput (MMCF/year) = Heat Input Capacity (MMBtu/hr) * 8760 hours/year * 1 MMCF/1000 MMBtu
Potential To Emit (tons/year) = Potential Throughput (MMCF/year) * Emission Factor (lb/MMCF) * 1 ton//2000 lbs

See next page for HAPs emissions calculations.

Natural Gas Combustion Only
Four (4) Drying Ovens

Company Name: Viskase Corp.
Address:
MSOP: 111-16843
Plt ID: 111-00008
Reviewer: ERG/SD
Date: May 30, 2003

HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor (lb/MMCF)	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential To Emit (tons/year)	3.68E-05	2.10E-05	1.31E-03	3.15E-02	5.96E-05

HAPs - Metals

	Lead	Cadmuim	Chromium	Manganese	Nickel
Emission Factor (lb/MMCF)	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential To Emit (tons/year)	8.76E-06	1.93E-05	2.45E-05	6.66E-06	3.68E-05

Methodology is the same as previous page.

The five highest organic and metal HAPs emission factors as provided above are from AP-42, Chapter 1.4, Table 1-4.2, 1.4-3 and 1.4-4 (July, 1998)..
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emission Calculations
Natural Gas Combustion Only
Three (3) Boilers

Company Name: Viskase Corp.
Address: 102 East Bailie Street, Kentland, IN 47951
MSOP: 111-16843
Plt ID: 111-00008
Reviewer: ERG/SD
Date: May 30, 2003

Heat Input Capacity MMBtu/hour		Potential Throughput MMCF/year
10.00	(3 Units Total)	87.6

Pollutant

	PM*	PM10*	SO_2	NO_x	VOC	CO
Emission Factor (lb/MMCF)	7.6	7.6	0.6	100.0 **see below	5.5	84.0
Potential To Emit (tons/year)	0.33	0.33	0.03	4.38	0.24	3.68

*PM and PM_{10} emission factors are filterable and condensible PM and PM_{10} combined.

**Emission Factors for NO_x: Uncontrolled = 100, Low NO_x Burner = 50, Low NO_x Burners/Flue gas recirculation = 32

METHODOLOGY

All Emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Emission factors from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (July, 1998).

Potential Throughput (MMCF/year) = Heat Input Capacity (MMBtu/hr) * 8760 hours/year * 1 MMCF/1000 MMBtu
Potential To Emit (tons/year) = Potential Throughput (MMCF/year) * Emission Factor (lb/MMCF) * 1 ton//2000 lbs

See next page for HAPs emissions calculations.

Appendix A: Emission Calculations
Natural Gas Combustion Only
Three (3) Boilers

Company Name: Viskase Corp.
Address: 102 East Bailie Street, Kentland, IN 47951
MSOP: 111-16843
Plt ID: 111-00008
Reviewer: ERG/SD
Date: May 30, 2003

HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor (lb/MMCF)	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential To Emit (tons/year)	9.198E-05	5.256E-05	3.285E-03	7.884E-02	1.489E-04

HAPs - Metals

	Lead	Cadmuim	Chromium	Manganese	Nickel
Emission Factor (lb/MMCF)	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential To Emit (tons/year)	2.190E-05	4.818E-05	6.132E-05	1.664E-05	9.198E-05

Methodology is the same as previous page.

The five highest organic and metal HAPs emission factors as provided above are from AP-42, Chapter 1.4, Table 1-4.2, 1.4-3 and 1.4-4 (July, 1998)..
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emissions Calculations
VOC from Printing Press 1

Company Name: Viskase Corp.
Address: 102 East Bailie Street, Kentland, IN 47951
MSOP: 111-16843
Plt ID: 111-00008
Reviewer: ERG/SD
Date: May 30, 2003

Throughput

Press I.D.	Maximum Line Speed (feet/min)	Maximum Print Width (inches)	MMin^2/year
Press 1	174	2.61	2,859.25

INK VOCS

Ink Name Press Id	Maxium Coverage '(lbs/MMin^2)	Weight % Volatiles*	*Flash Off %	Throughput (MMin^2/year)	PTE (tons/year)
Press 1 Ink/Press Dilution	11.7	77.0%	100%	2859	12.9

PTE VOC =	**12.9**	**ton/year**

Note: Potential to emit calculations are based on operational limits
*HEAT SET OFFSET PRINTING HAS AN ASSUMED FLASH OFF OF 80%. OTHER TYPES OF PRINTERS HAVE A FLASH OFF OF 100%.
(Source -OAQPS Draft Guidance, "Control of Volatile Organic Compound Emisions from Offset Lithographic Printing (9/93))

METHODOLOGY
Throughput (MMin^2/year) = Maxium line speed (feet/minute) * 12 inches/feet * Maximum print width (inches) * 60 minutes/ hour * 8760 hours/year * 1MMin^2/10,00,000 inch^2
PTE VOC (tons/year) = Maximum Coverage lbs/MMin^2 * Weight % volatiles (weight % of water & organics - weight % of water) * Flash off % * Throughput (MMin^2/year) * 1 ton/ 2000 lbs

Appendix A: Emissions Calculations
VOC from Printing Press 2

Company Name: Viskase Corp.
Address: 102 East Bailie Street, Kentland, IN 47951
MSOP: 111-16843
Plt ID: 111-00008
Reviewer: ERG/SD
Date: May 30, 2003

Throughput

Press I.D.	Maximum Line Speed (feet/min)	Maximum Print Width (inches)	MMin^2/year
Press 2	131	5.80	4,773.92

INK VOCS

Ink Name Press Id	Maxium Coverage '(lbs/MMin^2)	Weight % Volatiles*	*Flash Off %	Throughput (MMin^2/year)	PTE (tons/year)
Press 2 Ink/ Press Dilution	12.9	77.0%	100%	4774	23.7

PTE VOC =	**23.7**	**ton/year**

Note: Potential to emit calculations are based on operational limits
*HEAT SET OFFSET PRINTING HAS AN ASSUMED FLASH OFF OF 80%. OTHER TYPES OF PRINTERS HAVE A FLASH OFF OF 100%.
(Source -OAQPS Draft Guidance, "Control of Volatile Organic Compound Emisions from Offset Lithographic Printing (9/93))

METHODOLOGY
Throughput (MMin^2/year) = Maxium line speed (feet/minute) * 12 inches/feet * Maximum print width (inches) * 60 minutes/ hour * 8760 hours/year * 1MMin^2/10,00,000 inch^2
PTE VOC (tons/year) = Maximum Coverage lbs/MMin^2 * Weight % volatiles (weight % of water & organics - weight % of water) * Flash off % * Throughput (MMin^2/year) * 1 ton/ 2000 lbs

Appendix A: Emissions Calculations
VOC from Printing Press 3

Company Name: Viskase Corp.
Address: 102 East Bailie Street, Kentland, IN 47951
MSOP: 111-16843
Plt ID: 111-00008
Reviewer: ERG/SD
Date: May 30, 2003

Throughput			
Press I.D.	Maximum Line Speed (feet/min)	Maximum Print Width (inches)	MMin^2/year
Press 3	444.3	1.276	3,575.72

INK VOCS					
Ink Name Press Id	Maxium Coverage '(lbs/MMin^2)	Weight % Volatiles*	*Flash Off %	Throughput (MMin^2/year)	PTE (tons/year)
Press 3 Ink/Press Dilution	12.8	77.0%	100%	3576	17.6

PTE VOC =	**17.6**	**ton/year**

Note: Potential to emit calculations are based on operational limits
*HEAT SET OFFSET PRINTING HAS AN ASSUMED FLASH OFF OF 80%. OTHER TYPES OF PRINTERS HAVE A FLASH OFF OF 100%.
(Source -OAQPS Draft Guidance, "Control of Volatile Organic Compound Emisions from Offset Lithographic Printing (9/93))

METHODOLOGY
Throughput (MMin^2/year) = Maxium line speed (feet/minute) * 12 inches/feet * Maximum print width (inches) * 60 minutes/ hour * 8760 hours/year * 1MMin^2/10,00,000 inch^2
PTE VOC (tons/year) = Maximum Coverage lbs/MMin^2 * Weight % volatiles (weight % of water & organics - weight % of water) * Flash off % * Throughput (MMin^2/year) * 1 ton/ 2000 lbs

VOC from Printing Press 4

Company Name: Viskase Corp.
Address:
MSOP: 111-16843
Plt ID: 111-00008
Reviewer: ERG/SD
Date: May 30, 2003

Throughput			
Press I.D.	Maximum Line Speed (feet/min)	Maximum Print Width (inches)	MMin^2/year
Press 4	237	1.36	2034

INK VOCS					
Ink Name Press Id	Maxium Coverage '(lbs/MMin^2)	Weight % Volatiles*	*Flash Off %	Throughput (MMin^2/year)	PTE (tons/year)
Press 4 Ink/ Press Dilution	13.56	77.0%	100%	2034	10.6

PTE VOC =	**10.6**	**ton/year**

*HEAT SET OFFSET PRINTING HAS AN ASSUMED FLASH OFF OF 80%. OTHER TYPES OF PRINTE
(Source -OAQPS Draft Guidance, "Control of Volatile Organic Compound Emisions from Offset Lithographic Printing (9/93))

METHODOLOGY
Throughput (MMin^2/year) = Maxium line speed (feet/minute) * 12 inches/feet * Maximum print width (inches) * 60 minutes/ hour * 8760 hours/year * 1MMin^2/10,00,000 inch^2
PTE VOC (tons/year) = Maximum Coverage lbs/MMin^2 * Weight % volatiles (weight % of water & organics - weight % of water) * Flash off % * Throughput (MMin^2/year) * 1 ton/ 2000 lbs

Appendix A: Emissions Calculations
PM/PM10 and VOC Emissions
From Nylon Extruder Line, Fibrous Area, Small Casings

Company Name: Viskase Corp.
Address: 102 East Bailie Street, Kentland, IN 47951
MSOP: 111-16843
Plt ID: 111-00008
Reviewer: ERG/SD
Date: May 30, 2003

Process	Maximum Throughput Rate Of Plastic Pellets (lbs/hour)	* Emission Factor lbs VOC/10° lbs processed	* Emission Factor lbs PM/10° lbs processed	PTE of VOC (tons/year)	PTE of PM/PM10 (tons/year)
Nylon Extrusion Line	156.8	122	6	0.21	0.01
TOTAL SUM				**0.21**	**0.01**

***Emission Factor from Journal of Air & Waste Management Association Vol , 2001 *Development of Emission Factors for Polyamide Processing*

Process	Material	Maximum Usage Rate of Material Used (lbs/year)	Maximum Usage Rate of Material Used (lbs/hour)	VOC Content %	PTE of VOC (tons/year)	PTE PM/PM10 (tons/year)
Fibrous Area (Shirmatic & Large Casings)	Mineral Oil	753289	86.0	1.0%	3.77	
Small Casings	Mineral Oil	440385	50.3	1.0%	2.20	
Fibrous Area (Shirmatic and Large Casings)	Liquid Smoke & Miscellaneous	2061000	235	0.5%	5.15	
Large Casings	Potato Starch(Dust)	20526	2.34	1.0%	-	0.10
TOTAL SUM					**11.1**	**0.10**

METHODOLOGY

Nylon Extrusion Line

PTE (tons/year) = Maximum Throughput Rate (lbs/hour) * Emission Factor * 8760 hours/year * 1 ton/2000 lbs * Safety Factor of 2.5

Fibrous Area, Small Casings and Large Casings

PTE of VOC (lbs/hour) = Amount of Material Used (lbs/year) * 1/ Maximum Operation Capacity (%) * VOC Emission Factor * 8760 hours/year
PTE of VOC (tons/year) = Amount of Material Used (lbs/year) * 1/ Maximum Operation Capacity (%) * VOC Emission Factor * 1 ton/2000 lbs
PTE of PM/PM10 (tons/year) = Amount of Material Used (lbs/year) * 1/ Maximum Operation Capacity (%) * Emission Factor * 1 ton/2000 lbs

Appendix A: Emissions Calculations
HAP Emissions From Printing Press Inks

Company Name: Viskase Corp.
Address: 102 East Bailie Street, Kentland, IN 47951
MSOP: 111-16843
Plt ID: 111-00008
Reviewer: ERG/SD
Date: May 30, 2003

Line	Worst Case Inks	Components Containing HAPs	Max Ink Used (tons/year)	*Ratio %	Max. Component Used (tons/year)	Toluene Weight %	(tpy)	Xylene Weight %	(tpy)	1,6 - H. Diisocynate Weight %	(tpy)	Ethyl Benzne Weight %	(tpy)	Methylene Chloride Weight %	(tpy)	Methyl Alcohol Weight %	(tpy)
NOJAX	Red	DESMODUR	133.4	2.34%	3.122	0%	0.0	12.25%	0.38	0.5%	0.016	3.0%	0.094	0%	0.0	0%	0.0
	Yellow	TOLUOL	133.4	0.097%	0.129	100%	0.129	0%	0.0	0%	0.0	0%	0.0	0%	0.0	0%	0.0
FLEXO	600 Red	DESMODUR	133.4	4.22%	5.630	0%	0.0	12.25%	0.69	0.5%	0.028	0%	0.0	0%	0.0	0%	0.0
	100 White	TOLUOL	133.4	0.097%	0.129	100%	0.129	0%	0.0	0%	0.0	0%	0.0	0%	0.0	0%	0.0
Zip Strip (Cleaning Solvent)			0.270	100%	0.270	0%	0.0	0%	0.0	0%	0.0	0%	0.0	80%	0.22	4.0%	0.01
							0.26		**1.07**		**0.04**		**0.094**		**0.22**		**0.01**

Highest Single HAP (Xylene) = 1.07
Total HAPs = 1.69

* The ratio represents the percentage of the component in the total ink, as provided by the source.

METHODOLOGY

Potential To Emit HAPs (tons/year) = Max Usage Rate (tons/year) * Ratio % * Weight % HAP

Appendix A: Emissions Calculations
Summary Emissions

Company Name: Viskase Corp.
Address: 102 East Bailie Street, Kentland, IN 47951
MSOP: 111-16843
Plt ID: 111-00008
Reviewer: ERG/SD
Date: May 30, 2003

POTENTIAL TO EMIT BEFORE CONTROLS IN TONS PER YEAR

	PM	PM10	SO_2	NOx	VOC	CO	* Highest Single HAP	Total HAPs
Combustion Units								
Four (4) Drying Ovens	0.13	0.13	0.01	1.8	0.10	1.47	Negligible	Negligible
Three (3) Boilers	0.33	0.33	0.03	4.4	0.24	3.68		
Press Operartions								
Press 1					12.9		1.07	1.69
Press 2					23.7			
Press 3					17.6			
Press 4					10.6			
Non Press Operations								
Small Casings					2.20			
Fibrous Area	0.10				8.92			
Nylon Extruder Line	0.01				0.21			
TOTAL SUM	**0.58**	**0.47**	**0.04**	**6.13**	**76.3**	**5.15**	**1.07**	**1.69**

* Xylene